Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1-15. (Canceled)
- 16. (Currently Amended) A method for preferentially inhibiting proliferation of genetically engineered T cells in an animal containing them, wherein the said genetically engineered T cells are introduced to the animal and said genetically engineered T cells comprise include a nucleic acid encoding a mutated macrolide binding protein (MBP) selected from an FK506-binding protein (FKBP), cyclophilin, calcineurin, and FKBP:rapamycin associated protein (FRAP),

wherein said which method comprises administering to the animal a macrolide which binds to the mutated MBP or forms a complex including the mutated MBP, thereby and which inhibitsing proliferation of T cells expressing the mutated MBP,

wherein said genetically engineered T cells are autologous or allogeneic to the animal, and

wherein, relative to the wild-type MBP, the mutated MBP contains an altered amino acid sequence and has an altered specificity for binding to or forming a complex with a macrolide.

- 17. (Canceled)
- 18. (Previously presented) The method of claim 16, wherein the macrolide binds to or forms a complex with the mutated MBP with a dissociation constant, Kd, at least one order of magnitude less than its Kd for binding to or forming a complex with wild-type MBP.
- 19. (Previously presented) The method of claim 16, wherein the macrolide binds to or forms a complex with the mutated MBP with a dissociation constant, Kd, at least three orders of magnitude less than its Kd for binding to or forming a complex with wild-type MBP.

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- 20. (Currently Amended) The method of claim 16, wherein the nucleic acid was introduced into the said T cell ex vivo by DNA transfection.
- 21. (Currently Amended) The method of claim 16, wherein the nucleic acid was introduced into the said T cell ex vivo by virus-mediated transduction.
- 22. (Currently Amended) The method of claim 16, wherein the nucleic acid was introduced into the said T cell ex vivo by homologous recombination.
- 23. (Previously presented) The method of claim 16, wherein the macrolide is an analog of rapamycin, FK506 or cyclosporin.
- 24. (Previously presented) The method of claim 16, wherein the animal is a mammal.
- 25. (Previously presented) The method of claim 24, wherein the animal is a human.
- 26-28. (Canceled)
- 29. (Previously presented) The method of claim 16, wherein the expression of the mutated nucleic acid is transcriptionally regulated by a T-cell specific transcriptional regulatory sequence.
- 30-38. (Canceled)
- 39. (Currently amended) A method for providing an animal comprising genetically engineered which contains T cells, wherein the proliferation of which said T cells is may be preferentially inhibited, the said method comprising introducing into said animal said genetically engineered T cells, which containing comprise a nucleic acid encoding a mutated macrolide binding protein (MBP), wherein
- (a) the said mutated MBP is selected from an FK506-binding protein (FKBP), cyclophilin, calcineurin, and FKBP:rapamycin associated protein (FRAP); and

(b) relative to the wild-type MBP, the mutated MBP contains an altered amino acid sequence has an altered specificity for binding to or forming a complex with a macrolide.

40-45. (Canceled)